the lack of editing and refereeing and the shortage of (space for) hard data. Some of the claims made here are not likely to be substantiated elsewhere!

Overall, the volume is a good browse for the skeptical chemist and gives an interesting, if transient, 'spy satellite' picture of what's going on in nucleic acid chemistry in Europe. If your library doesn't subscribe to these NAR Supplements, it should!

G.M. Blackburn

DNA Cloning-A Practical Approach (Vol. III)

Edited by D.M. Glover

IRL Press; Oxford and Washington, 1987

254 pages. £ 17.00, $ 32.00

This volume of the DNA Cloning series describes a further set of techniques essential to the analysis of the structure, regulation and expression of genes. The 10 chapters in this book deal broadly with the handling of large pieces of DNA in cosmids, the expression of genes in heterologous systems and purification and analysis of the resulting proteins, and finally, the introduction of DNA into mammalian cells.

All of the chapters in this book presume a basic knowledge of cloning which has allowed each of the contributors to provide the degree of experimental detail necessary for the reader to use this book as a teach-yourself manual. In contrast to many cloning manuals this book describes the fundamental steps of procedure without neglecting to include those small details which can be the difference between success and failure. For example, in the chapter on the use of phage encoded RNA polymerase promotors the authors provide a strong argument against the widespread use of UTP as the radiolabelled nucleotide, pointing out that CTP is a much better choice for the production of full-length RNAs.

The first three chapters of the book deal with the analysis of large pieces of genomic DNA in cosmids. Although chapter 1 is largely devoted to the manufacture of RNA probes this fits into this section because of the use of the SP6,T7 and T3 promotors in chromosome walking. The role of cosmids in walking along chromosomes is clearly outlined and the manner in which genetic recombination can simplify screening procedures is dealt with in depth. The following four chapters deal with the expression of eukaryotic genes in prokaryotic and yeast cells. Recovery, rather than production, of bacterially synthesised proteins is frequently a major problem and this is addressed by means of a series of examples. This theme is extended in chapters describing how antibodies can be raised to the non-bacterial portions of fusion proteins and how yeast can be used as an alternative system for solving problems of expression which were intractable in bacteria. The middle and final sections of the book are neatly linked with a chapter on expression of genes in mammalian cells using vectors with amplifiable sequences, and this is followed by a chapter on the use of retroviruses and how to make transgenic mice. In this final chapter the authors have included clear photographic material to help describe the surgery necessary to remove and implant eggs. They have also taken the space to address the problems of animal welfare and legal requirements which must be fulfilled before transgenic technology and be undertaken.

Throughout, this book is clearly illustrated and well referenced and will become as common in cloning laboratories as the two previous volumes.

R.K. Dudley